



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,289	04/27/2004	Todd C. Werner	G-244	3288
919 7590 08/27/2007 PITNEY BOWES INC. 35 WATERVIEW DRIVE P.O. BOX 3000 MSC 26-22 SHELTON, CT 06484-8000			EXAMINER SEVERSON, JEREMY R	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 08/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/709,289	WERNER, TODD C.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jeremy R. Severson	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,613,998 to DeWitt et al. (*hereinafter* "DeWitt") in view of US Patent No. 5,460,273 to Stevens (*hereinafter* "Stevens") and US Patent No. 5,772,200 to Ricciardi (*hereinafter* "Ricciardi").

DeWitt discloses a machine, comprising:

an elongate conveyor system (see Fig. 1) for transporting items to a hopper (96);

a printing and drying station (80) where ink is applied to said items and dried;

an elongate discharge apparatus said elongate discharge apparatus including a plurality of longitudinally-spaced apart deflectors for diverting preselected items from a first path of travel to a second path of travel (see Fig. 1, deflectors which divert mail to hoppers 96-99);

said elongate discharge apparatus including a plurality of bins, there being as many bins as there are deflectors (*Id.*);

said elongate conveyor system and said elongate discharge apparatus being disposed in parallel relation to one another (see Fig. 1);

said printing and drying station being disposed in inter-connecting relation to said elongate conveyor system and said elongate discharge apparatus (see Fig. 1);

a first end of said printing and drying station being positioned at a discharge end of said elongate conveyor system (see Fig. 1);

Dewitt does not explicitly disclose that the stacking friction belts shown in fig. 1 are pivotally-mounted with respect to said hopper such that an item in said hopper is substantially fully engaged along its length when said pivotally-mounted friction belt is in a fully unpivoted position and such that an item in said hopper is engaged only at a leading end thereof when said pivotally-mounted friction belt is in a fully pivoted position. Ricciardi teaches such an apparatus in order to counteract the ever increasing force applied by the stack against the envelope conveying belt system. See Ricciardi, col. 3, lines 19 *et seq.* Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the stacking friction belts of Dewitt pivotally-mounted with respect to said hopper such that an item in said hopper is substantially fully engaged along its length when said pivotally-mounted friction belt is in a fully unpivoted position and such that an item in said hopper is engaged only at a leading end thereof when said pivotally-mounted friction belt is in a fully pivoted position, as taught by Ricciardi, in order to counteract the ever increasing force applied by the stack against the envelope conveying belt system.

Dewitt does not disclose:

a second end of said printing and drying station being positioned at an input end of said elongate discharge apparatus;

said elongate conveyor system, said printing and drying station, and said elongate discharge system collectively forming a square "U"-shaped configuration;

whereby an operator of said machine has unimpeded access to said elongate conveyor system, said printing and drying station, and said elongate discharge apparatus.

However, Stevens discloses a second end of said printing and drying station being positioned at an input end of said elongate discharge apparatus;

said elongate conveyor system, said printing and drying station, and said elongate discharge system collectively forming a square "U"-shaped configuration;

whereby an operator of said machine has unimpeded access to said elongate conveyor system, said printing and drying station, and said elongate discharge apparatus.

Stevens discloses the interchangeability of the of U-shape conveyor layout to the "in line" configuration (col. 8, lines 37 *et seq.*). Stevens further disclose that the U-shape is to allow access for the operator to various portion of the apparatus (*Id.*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DeWitt to use a U-shaped layout, as disclosed by Stevens, for the purpose of allowing operator access to various portions of the machine.

In regard to claims 2-4, see col. 7, lines 29 *et seq.*; see also Fig. 1.

In regard to claim 5, see Fig. 1 #95 which discloses belts, o-rings (i.e. belts), which sandwich the mail diverted by the deflector. Further, see how belt touching the deflector (belt 1) is deformed by the protruding roller of the opposite belt (belt 2) so that inherently belt 1 will snap the trailing end of the mail.

In regard to claim 6, DeWitt does not disclose a nip of opposed rollers which slow the mail prior to arrival in the bin. However, Examiner takes official notice slowing the mail prior to the impact with the bin is well known in the art as it prevents damage to mail item and further prevents the mail bouncing off the wall of the bin. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a pair of nip rollers for this purpose.

In regard to claim 9, see Buffer 50.

In regard to claim 10, said pivotally-mounted friction belt is positionable in an infinite number of pivotal positions of adjustment between said fully unpivoted and fully pivoted positions; the amount of driving force imparted to envelopes exiting said hopper being variable by adjusting the amount of pivoting of said pivotally-mounted friction belt. See fig. 1 of DeWitt as modified by Ricciardi.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeWitt in view of Stevens and Ricciardi and further in view of US Patent No. 6,969,059 to Gafner (*hereinafter* "Gafner").

Re claim 7, the apparatus of DeWitt as modified by Stevens and Ricciardi does not comprise a suction box for slowing the mail. However, Gafner discloses a suction

Art Unit: 3653

box (36, 37) for slowing mail prior to arrival. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DeWitt to include a suction box, as disclosed by Gafner, for the purpose of slowing mail prior to arrival in the hopper.

Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeWitt in view of Stevens and Ricciardi as applied to claim 6 above, and further in view of US Patent No. 5,772,200 to Sorensen (*hereinafter* "Sorensen").

Re claims 8 and 13, the apparatus of DeWitt as modified by Stevens and Ricciardi comprises everything except an air nozzle mounted downstream of said protruding rollers, between said protruding rollers and said nip; said items being envelopes having flaps; said air nozzle applying a positive air pressure to respective flaps of envelopes. Sorensen teaches the use of air nozzles to keep the envelope flaps closed. See Sorensen, col. 2, line 66 *et seq.* Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add an air nozzle mounted downstream of the protruding rollers in the apparatus of DeWitt as modified by Stevens and Ricciardi, as taught by Sorensen, in order to keep the envelope flaps closed.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeWitt in view of Stevens and Ricciardi and further in view of US Patent No. 6,822,182 to Kechel (*hereinafter* "Kechel").



Re claim 11, the apparatus of Dewitt as modified by Stevens and Ricciardi does not comprise separator cards. However, Kechel discloses the use of separator cards in sorting mail for the purpose of defining different mail groups. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DeWitt to include separator cards, as disclosed by DeWitt, for the purpose of defining different mail groups.

### ***Response to Arguments***

Applicant's arguments filed 21 June 2007 have been fully considered but they are not persuasive.

Applicant argues that one of ordinary skill in the art would not have been motivated to modify the device of DeWitt in order to counteract the ever increasing force applied by the stack against the envelope conveying belt system, because in DeWitt there is no ever increasing force. Remarks, p. 4. The examiner respectfully disagrees. As the stack gets higher, bin floors 96, 97, 98, 99 move down and the force applied by the floors on the stack increase, thus causing the stack to exert an ever increasing force on the belt. Therefore, one of ordinary skill in the art would have been motivated to modify the device of DeWitt with the teaching of Ricciardi.



Applicant argues that Ricciardi fails to teach or suggest “a pivotally-mounted friction belt positioned with respect to said hopper such that an item in said hopper is substantially fully engaged along its length when said pivotally-mounted friction belt is in a fully unpivoted position and such that an item in said hopper is engaged only at a leading end thereof when said pivotally-mounted friction belt is in a fully pivoted position.” Remarks, p. 4. The examiner respectfully disagrees. Ricciardi discloses, “[t]he belt portion extending around the axially movable roller is biased to pivot into contact with the stack of articles.” Col. 3, lines 19-21.

Applicant argues that “even if the belts of DeWitt were considered O-rings, as suggested in the Office Action, DeWitt would fail to teach or suggest a ‘plurality of elongate O-rings rotatably mounted on said elongate discharge apparatus’ and a ‘plurality of elongate flat belts rotatably mounted on said elongate discharge apparatus along said second path of travel ... in confronting relation to said plurality of O-rings.’ Indeed, with the suggested interpretation, DeWitt would in fact teach O-rings in opposing relation to other O-rings, not ‘belts... in confronting relation to said plurality of O-rings,’ as claimed.” Remarks, p. 5. The examiner respectfully disagrees. It is the examiner’s position that the belts of DeWitt can be described as both elongate flat belts and O-rings.

Applicant argues that “Sorensen fails to teach or suggest an ‘air nozzle mounted downstream of said protruding rollers, between said protruding rollers and said nip,’

Art Unit: 3653

'said air nozzle applying a positive air pressure to respective flaps of envelopes as respective trailing ends of said envelopes clear said protruding rollers,' and 'said respective flaps are pushed into overlying relation to a main body of said envelopes so that said flaps are not rammed by the flaps of trailing items,' as recited in claim 13. For example, in the device of Sorensen, air is blown laterally at the stack to help separate the sheets in the stack, as discussed above." Remarks, p. 8. The examiner respectfully disagrees. Sorensen teaches the usefulness of air nozzles to keep envelope flaps closed during feeding, and one of ordinary skill in the art would have been able to use air nozzles to keep envelope flaps closed downstream of the protruding rollers in the apparatus of DeWitt as modified by Stevens and Ricciardi.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

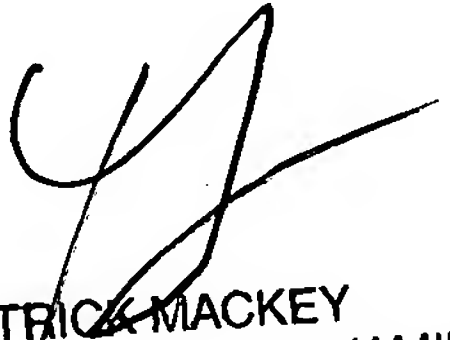
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Severson whose telephone number is (571) 272-2209. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey, can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy R Severson  
Examiner  
Art Unit 3653

jrs

  
PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600